

CLAIMS

1. A bilaterally symmetrical light weight microprocessor controlled electronic pipette holdable in either the right or left hand of a user with the thumb of the user's hand holding the pipette free to actuate forwardly facing control keys to set the operation of the pipette and a trigger switch to actuate operation of the pipette while viewing a forwardly facing display, the pipette comprising:

an axially elongated hollow housing having a vertically extending longitudinal axis and including vertically extending and substantially coaxial upper and lower portions;

the upper portion of the housing including a forward compartment and a rear compartment,

the forward compartment containing

a forwardly facing electronic display adjacent a top of the housing,

a plurality of forwardly facing, pipette operation setting control keys and

a forwardly facing, pipette operation actuating trigger switch,

the display and control keys being bilaterally symmetrical relative to the longitudinal axis of the housing, and

the housing containing a battery for powering a microprocessor and motor for the pipette;

the lower portion of the housing comprising a vertically elongated handle coaxial with the longitudinal axis of the housing and having contiguous bilaterally symmetrical and

vertically extending forward and rear portions for hand gripping by the user of the pipette,

the forward portion of the handle extending forward of the upper portion of the housing and extending vertically downward to a lower end of the housing, and

the rear portion of the housing extending rearward from the forward portion of the handle and having an extension for engaging an upper side of an index or middle finger of the user while the user is gripping the handle with the thumb of the user free to accurate any of the bilaterally symmetrical control keys and the trigger switch in any sequence desired while clearly viewing the electronic display as it responds to the actuation of the control keys and trigger switch,

the extension and forward and rear portions of the handle being bilaterally symmetrical relative the longitudinal axis of the housing.

2. The pipette of claim 1 wherein the control keys are below the display.

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3. The pipette of claim 1 wherein the handle contains an upper portion of a pipette tip ejector mechanism having a thumb actuated push button adjacent a top of the forward portion of the handle and a vertically moveable tip ejector extending below the handle to encircle a pipette tip mounting shaft adjacent a lower end thereof to eject a pipette tip from the shaft in response to thumb actuation of the push button by the pipette user, the tip

ejector and push button being bilaterally symmetrical relative to the longitudinal axis of the pipette housing.

4. The pipette of claim 1 wherein the extension includes a
5 hook extending rearward from a back of the upper end of the handle.

10 5. The pipette of claim 1 wherein the trigger switch is one of a plurality of forwardly facing, pipette operation actuating triggers switches, the plurality of trigger switches being bilaterally symmetrical relative to the longitudinal axis of the housing.

15 6. The pipette of claim 1 wherein a first one of the control keys comprises a pipette mode of operation selection key.

20 7. The pipette of claim 6 wherein a second one of the control keys comprises a reset key for resetting the mode of operation of the pipette.

8. The pipette of claim 6 wherein others of the control keys comprise keys for increasing and decreasing operational value settings for the pipette in the mode of operation selected by the first one of the control keys.

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9. The pipette of claim 8 wherein operation of the others of the control keys also controls numeric values displayed by the electronic display.

5 10. The pipette of claim 5 wherein a first one of the control keys comprises a pipette mode of operation selection key and in at least one mode of pipette operation selected by the first one of the control keys, a first one of the trigger switches comprises an aspiration actuation trigger switch while a
10 second one of the trigger switches comprises a dispense actuation trigger switch for the pipette.

11. The pipette of claim 10 wherein in all other modes of pipette operation selected by the first one of the control keys,
15 actuation of any of the trigger switches will actuate a next programmed step in the pipette mode of operation selected by the first one of the control keys.